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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/245,625    02/05/99    BURCH

R    BUR-020

EXAMINER

HM22/0509

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ART UNIT

PAPER NUMBER

1615

DATE MAILED:

05/09/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/254,625

Applicant(s)

Burch et al

Examiner

Todd D. Ware

Group Art Unit

1615

☒ Responsive to communication(s) filed on May 10, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-24 is/are pending in the applicat

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-24 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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### **DETAILED ACTION**

Receipt of information disclosure statement filed 5-10-99 is acknowledged.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-13 and 23-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Recitation of “an imbibed fiber comprising... an elastomeric polymer capable of imbibing a chemotherapeutic agent; and a therapeutically effective amount of the chemotherapeutic agent imbibed in the fiber” is indefinite. From the specification, it appears that the fiber is imbibed with the therapeutic agent, however the phrase “imbibed fiber” can be interpreted as disclosing that the fiber itself is imbibed into something. Also, does are the phrases “capable of imbibing” and “agent imbibed in the fiber” intended to define that the fiber is not saturated with the agent and may imbibe more agent? In other words, when the fiber is already imbibed with the agent, is it still capable of imbibing more agent?

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***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Sablotsky et al (5,300,291; hereafter '291).

'291 discloses a rubber elastomeric polymer with penicillin incorporated therein (C7, L26-28; C9, L1-5).

5. Claims 1 and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Hill et al (5,098,711; hereafter '711).

'711 discloses nylon dental floss with chemotherapeutic agents such as penicillin, sodium fluoride, stannous fluoride, or chlorhexidine are impregnated within the nylon dental floss (C12, L11-13; C13, L51-52; C15, L16-20; Examples 1-4).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burch (5,433,226; hereafter '226) in view of Hill et al (5,098,711; hereafter '711).

Applicants claim a fiber and methods of making the fiber where a fiber having a segmented core of soft and hard segments is impregnated with a chemotherapeutic agent such as penicillin, sodium fluoride, stannous fluoride, or chlorhexidine.

'226 teaches dental floss fibers having a segmented core of hard and soft segments made of the compounds of the instant claims. '226 also teaches that this dental floss has a break elongation and tensile strength within applicants' ranges. '226 does not teach impregnating these dental floss fibers with a chemotherapeutic agent.

'711 is relied upon for teaching nylon dental floss with chemotherapeutic agents such as penicillin, sodium fluoride, stannous fluoride, or chlorhexidine are impregnated within the nylon dental floss by dipping the floss into an agitated bath containing the therapeutic agent.

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to combine the teachings of '226 and '711 with the expectation that the antimicrobial agents of '711 would impart antimicrobial properties to the fibers of '226 with the motivation of providing an effective means to deliver these antimicrobial agents to the oral cavity or gingiva.

### *Conclusion*

8. Currently, no claim is allowed. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd Ware whose telephone number is

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(703) 305-1700. The examiner can normally be reached on Monday through Friday from 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page, can be reached on (703) 308-2927. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235 or 308-1234.

THURMAN K. PAGE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

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5-5-00